**IN THE CLAIMS:**

Please amend the claims as follows:

1[]. (Currently Amended) An optical device comprising

- an anode;

- a cathode comprising barium, strontium or calcium; and

- a layer of organic semiconducting material between the anode and the cathode

wherein a layer of hole transporting and electron blocking material is located between the anode and the layer of organic semiconducting material.

2[]. (Currently Amended) An optical device according to claim 1 that is an electroluminescent device.

3[]. (Currently Amended) An optical device according to claim 2 that is a full ~~colour~~ color device wherein the layer of organic semiconducting material comprises red, green and blue electroluminescent materials.

4[]. (Currently Amended) An optical device according to ~~any preceding~~ claim 1 wherein the cathode comprises barium.

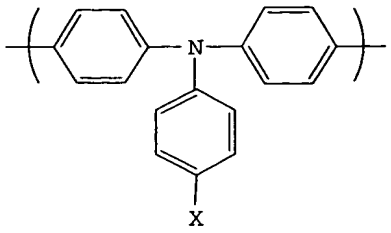
5[]. (Currently Amended) An optical device according to ~~any preceding~~ claim 1 wherein the layer of hole transporting and electron blocking material comprises a triarylamine.

6[]. (Currently Amended) An optical device according to claim 5 wherein the triarylamine is provided as repeat units of a polymer.

7[]. (Currently Amended) An optical device according to claim 6 wherein the polymer is a copolymer comprising one or more arylene co-repeat units.

8[]. (Currently Amended) An optical device according to claim 7 wherein at least one ~~or more~~ of the arylene co-repeat units ~~are~~ is selected from the group consisting of optionally substituted fluorene, spirofluorene, indenofluorene and phenylene~~, preferably 9,9-disubstituted fluorene-2,7-diyl~~.

9[]. (Currently Amended) An optical device according to ~~any one of claims 6-8~~ claim 6 wherein the the triarylamine repeat unit is selected from the group consisting of repeat units of formulae 1-6:

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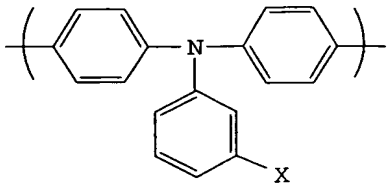


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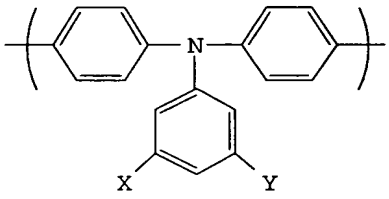


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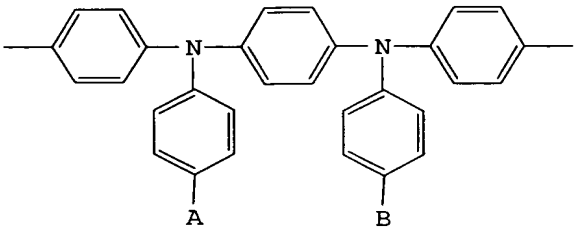


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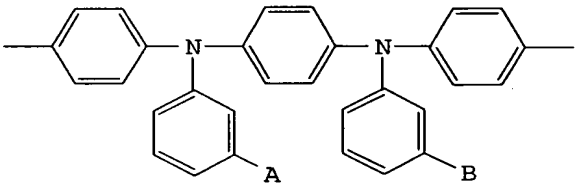


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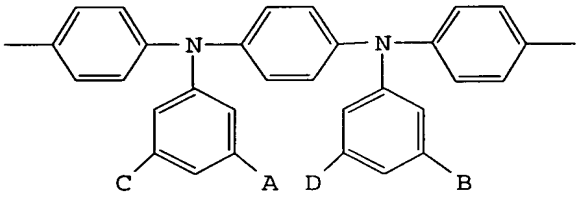


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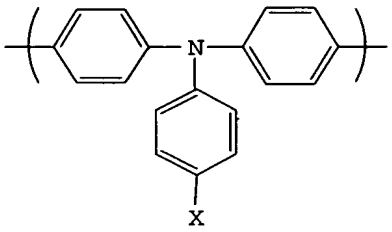
wherein X, Y, A, B, C, and D are independently selected from H or a substituent group. ~~More preferably, one or more of X, Y, A, B, C and D is independently selected from the group consisting of optionally substituted, branched or linear alkyl, aryl, perfluoroalkyl, thioalkyl, cyano, alkoxy, heteroaryl, alkylaryl and arylalkyl groups~~.

10[)]. (Currently Amended) An optical device according to ~~any preceding~~ claim 1 wherein the layer of organic semiconducting material is a semiconducting polymer~~, preferably a semiconducting copolymer~~.

11[)]. (Currently Amended) An optical device comprising a semiconducting copolymer according to claim ~~10~~ 27 wherein the semiconducting copolymer comprises repeat

units selected from the group consisting of optionally substituted fluorene, spirofluorene, indenofluorene and phenylene~~, preferably 9,9-disubstituted fluorene-2,7-diyl~~.

12[)]. (Currently Amended) An optical device comprising a semiconducting copolymer according to claim 10 ~~or 11~~ wherein said layer of organic semiconducting material is a semiconducting copolymer comprises a repeat unit selected from triarylamine repeat units of formulae 1-6: ~~defined in claim 9~~

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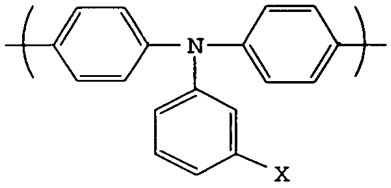


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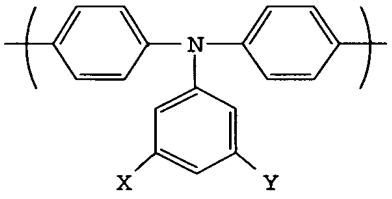


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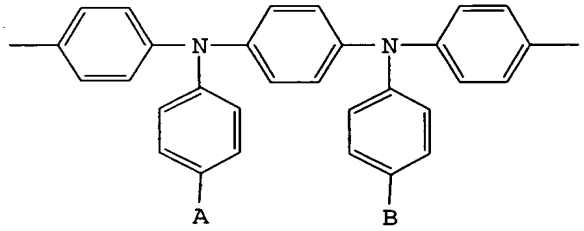


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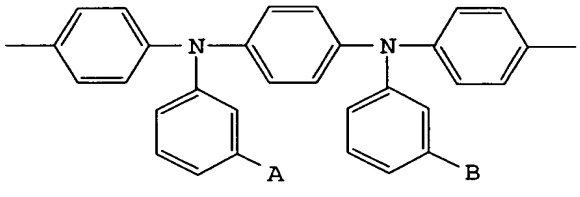


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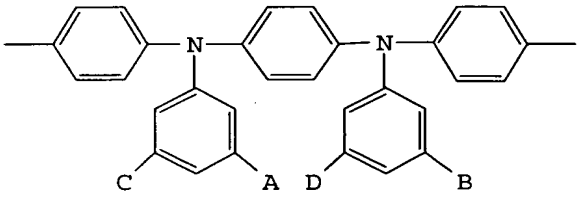


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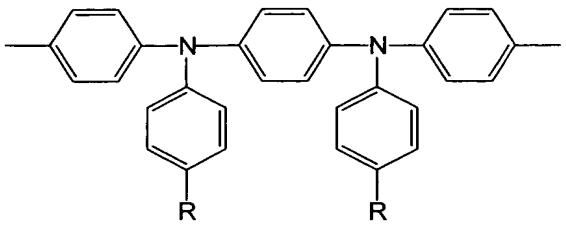
wherein X, Y, A, B, C, and D are independently selected from H or a substituent group.

13[]. (Currently Amended) An optical device according to claim 12 wherein said polymer is a copolymer comprising at least one co-repeat unit ~~is~~ comprising a repeat unit of formula (I):




(I)

wherein each R is independently selected from the group consisting of H or optionally substituted, branched or linear alkyl, aryl, perfluoroalkyl, thioalkyl, cyano, alkoxy, heteroaryl, alkylaryl and arylalkyl ~~group~~ groups~~, more preferably $C_{1-10}$ alkyl, yet more preferably butyl~~.

14[]. (Currently Amended) An optical device according to ~~any one of claims 12-14~~ 12 wherein the molar ratio of the triarylamine repeat units is less than or equal to 50 %~~, more preferably less than or equal to 30 %, most preferably 1-10 %~~.

15[]. (Currently Amended) An optical device according to ~~any preceding~~ claim 1 wherein a layer of hole injecting material is located between the anode and the layer of hole transporting and electron blocking material.

16[]. (Currently Amended) An optical device according to claim 15 wherein the layer of hole injecting material is poly(ethylene dioxythiophene).

17[]. (Currently Amended) An optical device according to ~~any preceding~~ claim 1 wherein the cathode comprises elemental barium.

18[]. (Currently Amended) A method of forming an optical device comprising

- providing a substrate comprising an anode;

- depositing a layer of hole transporting and electron blocking material onto the anode;

- depositing a layer of organic semiconducting material over the layer of hole transporting and electron blocking material; and

- depositing a cathode comprising barium, strontium or calcium over the layer of organic semiconducting material.

19[]. (Currently Amended) A method according to claim 18 ~~wherein~~ comprising depositing a layer of hole injecting material ~~is deposited~~ between the anode and the layer of hole transporting and electron blocking material.

20[]. (Currently Amended) A method according to claim 18 ~~or 19 wherein~~ comprising depositing both the layer of hole transporting and electron blocking material and the layer of organic semiconducting material ~~are both deposited~~ from solution.

21[]. (Currently Amended) A method according to claim 20 wherein both the layer of hole transporting and electron blocking material and the layer of organic semiconducting material are polymers.

22[]. (Currently Amended) A method according to claim 20 ~~or 21 wherein~~ comprising subjecting the hole transporting and electron blocking layer ~~is subjected~~ to heat treatment prior to deposition of the organic semiconducting material.

23[]. (Currently Amended) A method according to claim 22 wherein the heat treatment is below the glass transition temperature of the hole transporting and electron blocking material.

24[]. (Currently Amended) A method according to ~~any one of claims 20-23~~ claim 20 wherein the organic semiconducting material is substantially free of cross-linkable vinyl or ethynyl groups

25. (New) An optical device according to claim 7 wherein at least one of the arylene co-repeat units is 9,9-disubstituted fluorene-2,7-diyl.

26. (New) An optical device according to claim 9, wherein at one of X, Y, A, B, C, and D is independently selected from the group consisting of optionally substituted, branched or linear alkyl, aryl, perfluoroalkyl, thioalkyl, cyano, alkoxy, heteroaryl, alkylaryl and arylalkyl groups.

27. (New) An optical device according to claim 1 wherein the layer of organic semiconducting material is a semiconducting copolymer.

28. (New) An optical device according to claim 11 wherein the repeat units comprise 9,9-disubstituted fluorene-2,7-diyl.

29. (New) An optical device of claim 13 wherein at least one R is a $C_{1-10}$ alkyl group.

30. (New) An optical device of claim 13 wherein at least one R is a butyl group.

31. (New) An optical device according to 14 wherein the molar ratio of the triarylamine repeat units is less than or equal to 30 %.

32. (New) An optical device according to 14 wherein the molar ratio of the triarylamine repeat units is in the range 1-10%.